

FIG. 1

1

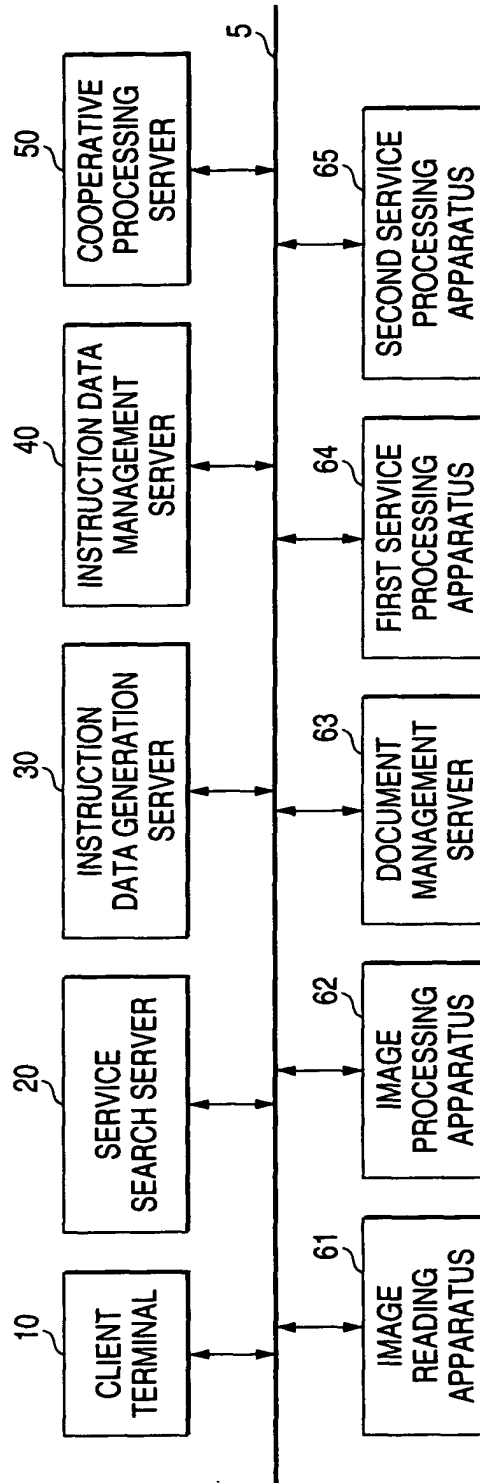
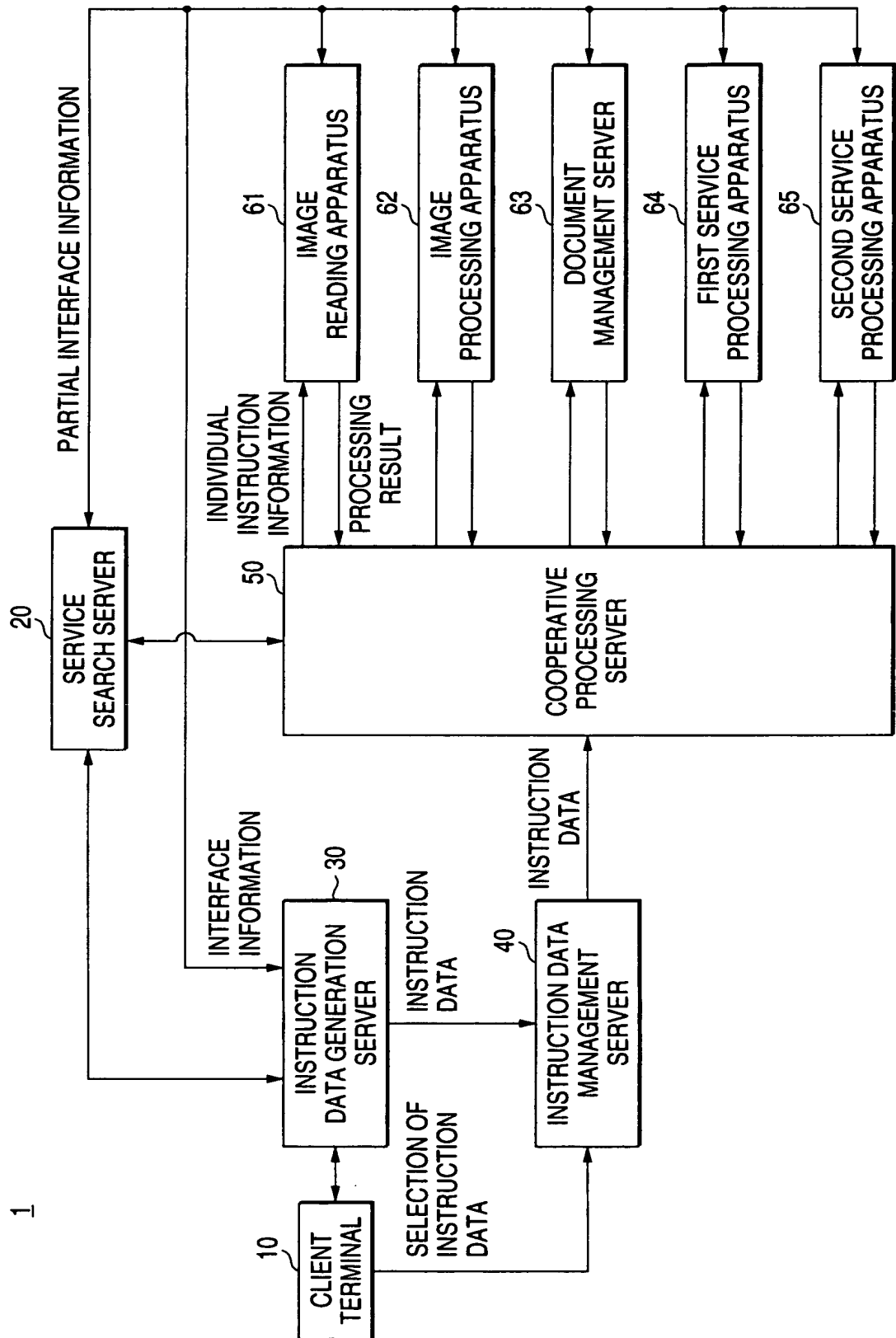


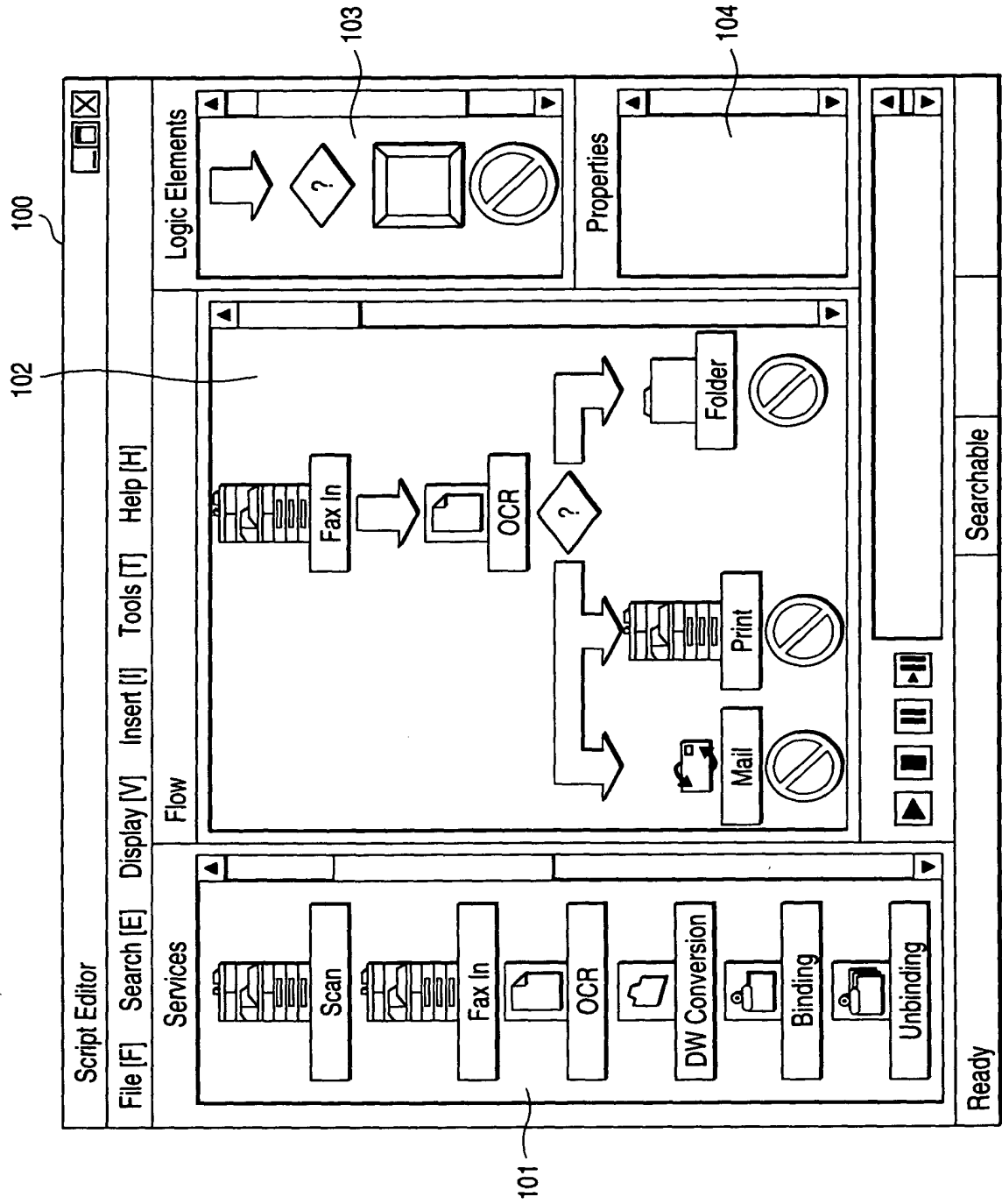
FIG. 2



**FIG. 3**

SERVICE CLASS
SERVICE NAME
SERVICE ICON
SERVICE LOCATION INFORMATION
INPUT
OUTPUT
PARAMETER RESTRICTION RULES
SERVICE LOCATION
METHOD NAME
INVOCATION SCHEME
IMPLICIT ELEMENTS

FIG. 4



*FIG. 5*

SERVICE CLASS
SERVICE NAME
SERVICE ICON
SERVICE LOCATION INFORMATION
INPUT
OUTPUT
PARAMETER RESTRICTION RULES
SERVICE LOCATION
METHOD NAME
INVOCATION SCHEME
IMPLICIT ELEMENTS
FLOW (INVOKE, MAP, METHOD) (CONTROL STRUCTURE, LOGICAL OPERATIONS)

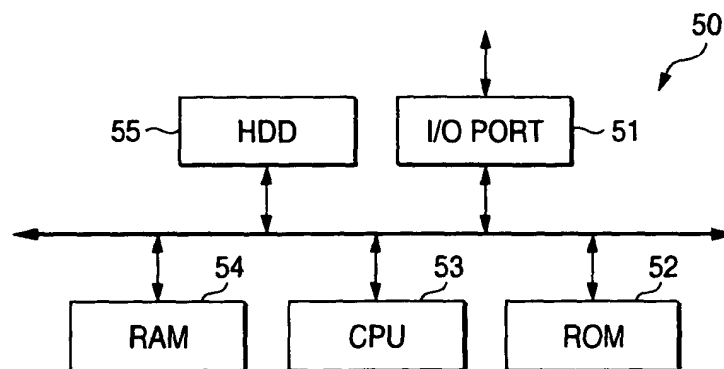
*FIG. 6*

FIG. 7

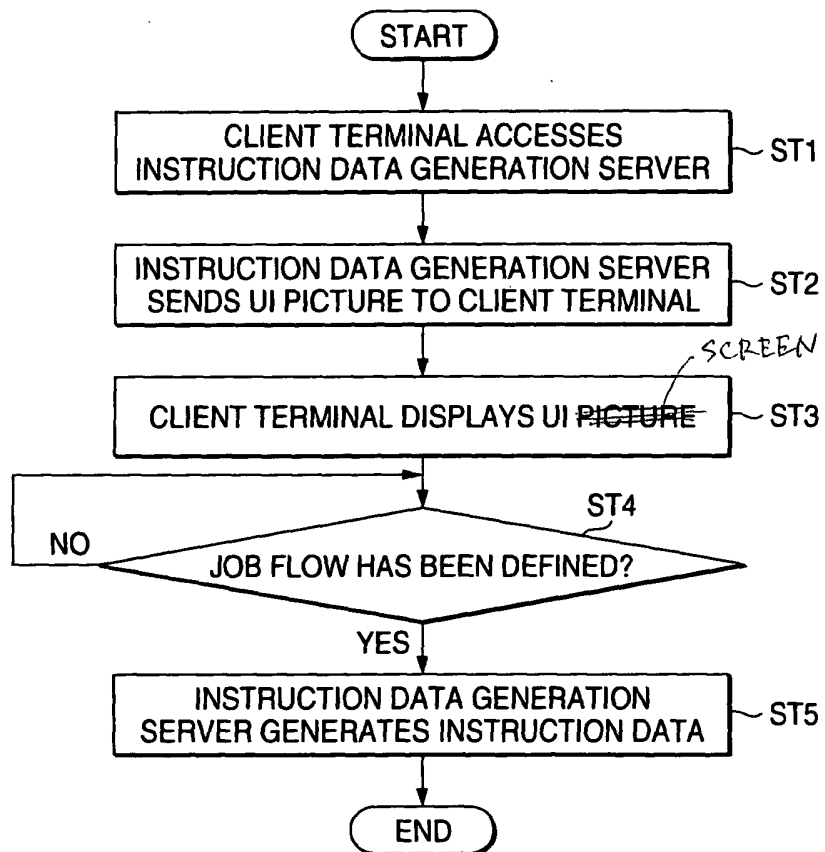


FIG. 8

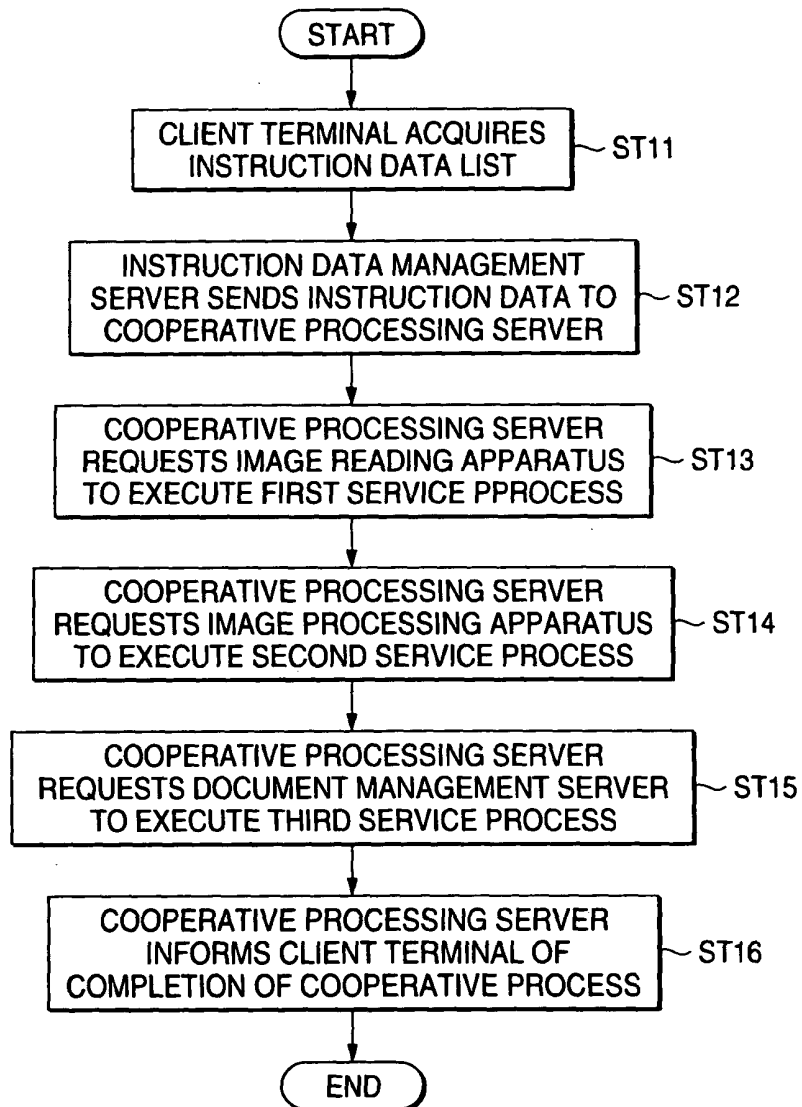
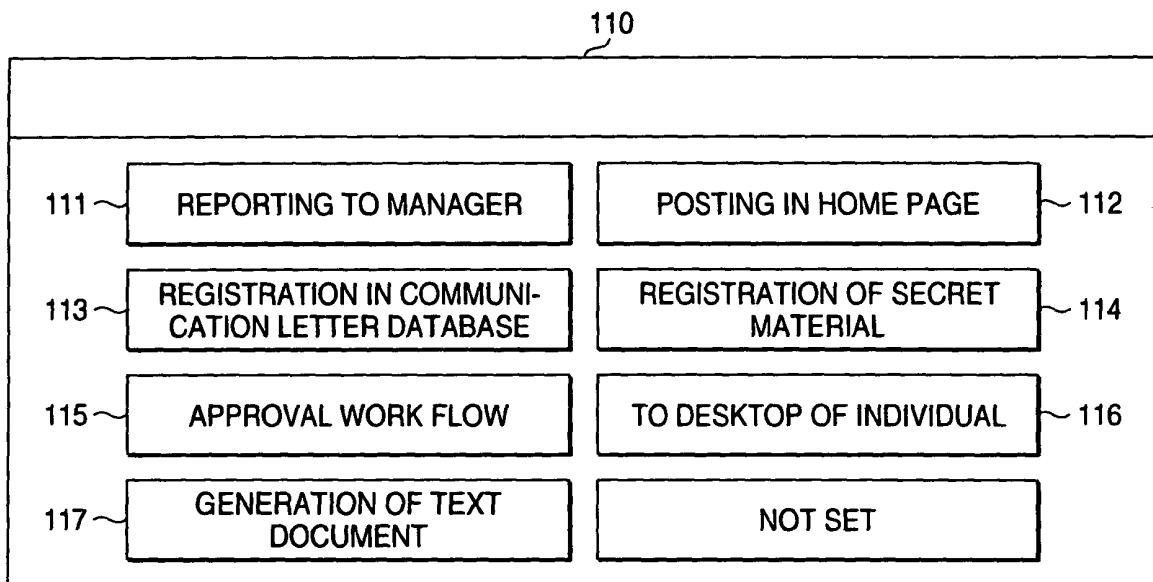


FIG. 9





*FIG. 10*

```

< ! - INSTRUCTION DATA AT START - - >
< Flow id = "0123456789" >
  < exec >
    < service name = "SCAN" >
      < param name = "RESOLUTION" value = "300" / >
    < / service >
    < service name = "OCR" >
      < param name = "POLICY" value = "SPEED PRIORITY" / >
    < / service >
    < service name = "STORAGE" >
      < param name = "LOCATION" value = "ftp: // server / folder" / >
    < / service >
  < / exec >
  < log >
  < / log >
< / Flow >

```

*FIG. 11*

```

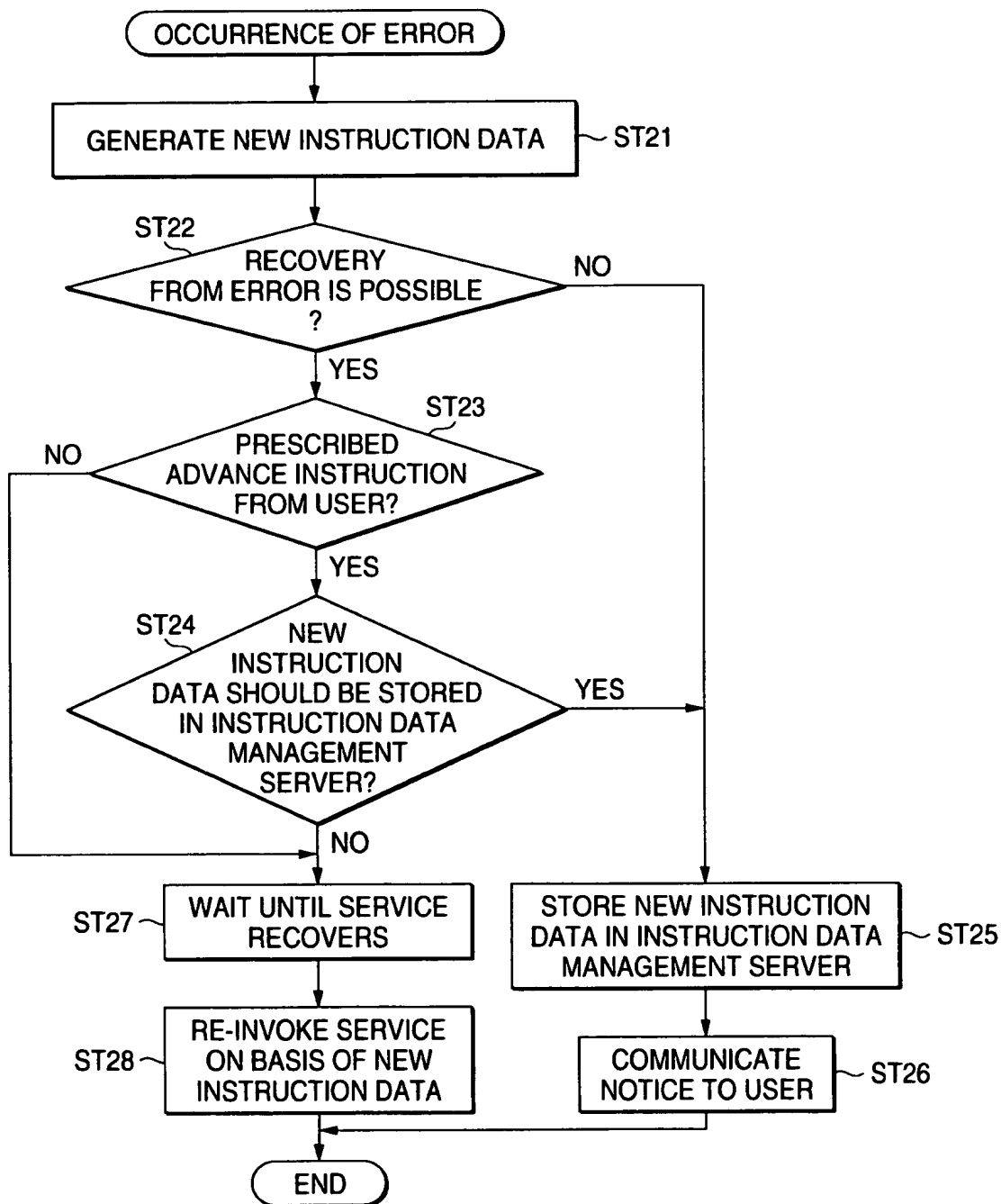
< ! - INSTRUCTION DATA AFTER END OF FIRST SERVICE - - >
< Flow id = "0123456789" >
  < exec >
    < service name = "OCR" >
      < param name = "POLICY" value = "SPEED PRIORITY" / >
    < / service >
    < service name = "STORAGE" >
      < param name = "LOCATION" value = "ftp: // server / folder" / >
    < / service >
  < / exec >
  < log >
    < service name = "SCAN" >
      < result value = "SUCCESS" / >
    < / service >
  < / log >
< / Flow >

```

FIG. 12

```
<!-- NEW INSTRUCTION DATA GENERATED AFTER FAILING IN PERFORM IN SECOND SERVICE -->
<Flow type = "once" reserved-id = "0123456789" >
  <exec >
    <service name = "OCR" >
      <param name = "POLICY" value = "SPEED PRIORITY" />
    </service >
    <service name = "STORAGE" >
      <param name = "LOCATION" value = "ftp: // server / folder" />
    </service >
  </exec >
  <document >
    <location type = "temporary" />
  </document >
  <log >
    <Flow id = "0123456789" >
      <exec >
        <service name = "STORAGE" >
          <param name = "LOCATION" value = "ftp: // server / folder" />
        </service >
      </exec >
      <log >
        <service name = "SCAN" >
          <result value = "SUCCESS" />
        </service >
        <service name = "OCR" >
          <result value = "TIME-OUT ERROR" />
        </service >
      </log >
    </Flow >
  </log >
</Flow >
```

FIG. 13



12/14

*FIG. 14*

```
< ! - INSTRUCTION DATA WITH SUBSTITUTIVE CONDITION - - >
< Flow >
  < exec >
    < service name = "FORMAT CONVERSION" >
      < param name = "FORMAT" value = "PDF" / >
      < substitutive-condition name = "USE FEE" value = "100YEN OF LESS" / >
    < /service >
  < /exec >
  < log >
  < /log >
< / Flow >
```

*FIG. 15*

```
< ! - INSTRUCTION DATA WITH POSSIBILITY OF RESTART - - >
< Flow >
  < exec >
    < service name = "FORMAT CONVERSION" >
      < param name = "FORMAT" type = "PDF" / >
      < restartable value = "false" / >
    < /service >
  < /exec >
  < log >
  < /log >
< / Flow >
```

*FIG. 16*

```
< ! - INSTRUCTION DATA WITH SUBSTITUTIVE CONDITION AND POSSIBILITY OF START - - >
< Flow >
  < exec >
    < service name = "FORMAT CONVERSION" >
      < param name = "FORMAT" value = "PDF" / >
      < substitutive-condition name = "USE FEE" value = "100YEN OF LESS" / >
      < restartable value = "false" / >
    < /service >
  < /exec >
  < log >
  < /log >
< / Flow >
```

FIG. 17

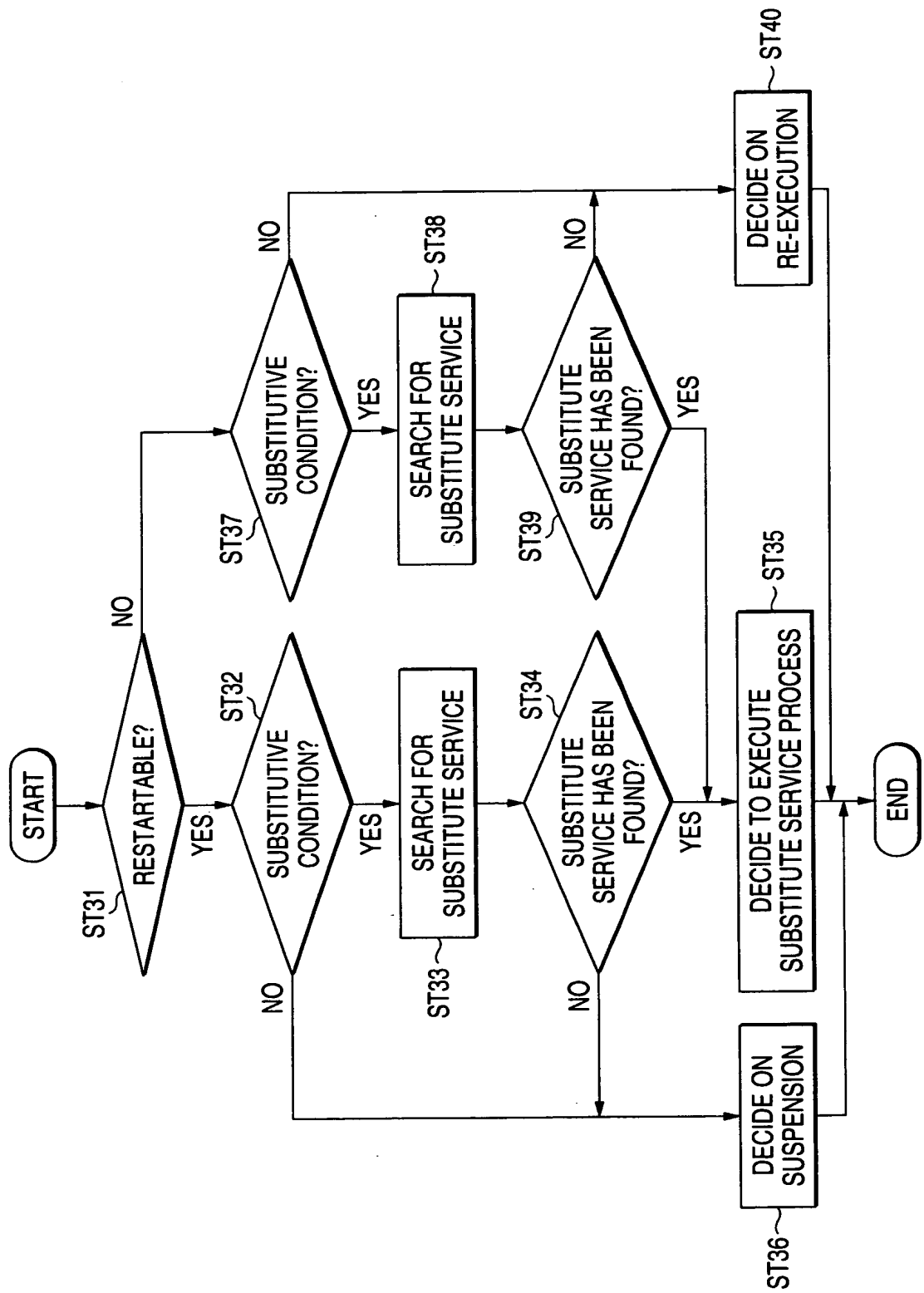


FIG. 18

SUBSTITUTE CONDITION / RESTARTABLE	PRESENT		ABSENT
	SUBSTITUTE SERVICE IS FOUND BY SEARCH	NO SUBSTITUTE SERVICE IS FOUND BY SEARCH	
TRUE	SUBSTITUTE SERVICE	SUBSTITUTE SERVICE → SUSPENSION	SUSPENSION
FALSE	SUBSTITUTE SERVICE	SUBSTITUTE SERVICE → RE-EXECUTION	RE-EXECUTION